

REMARKS

Claims 13, 15, 17, 23 and 25 remain pending in the present application. Claims 12, 14, 21, 22, 24 and 26-31 have been cancelled. Claims 13, 15, 17, 23 and 25 have been amended. Basis for the amendments can be found throughout the specification, claims and drawings as originally filed.

REJECTION UNDER 35 U.S.C. § 103

Claims 12, 15, 17, 21 and 25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada (U.S. Pat. No. 6,237,678) in view of Furukawa Electric Co LTD (JP 9268339). Claims 13 and 22-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada and Furukawa as applied to Claim 12 and 21 above, and further in view of Evans, et al. (U.S. Pat. No. 5,771,962). Applicants respectfully traverse the rejection of Claims 13, 22 and 23. Claim 13 has been amended to independent form to include the limitations of independent Claim 12 and Claim 23 has been amended to independent form to include the limitations of Claims 22 and 21. Claim 25 has been amended to also include the limitations of Claim 13. Claims 13, 23 and 25 define the brazing material as being applied in a substantially straight line to a joint surface between the flat top of the fin and the tube.

Because Yamada and Furukawa fail to disclose the brazing material in a straight line, the Examiner cited Evans where the Examiner states that Evans at column 4, lines

30-38 discloses that a brazing flux is placed along a joint line between the fin and the tube. Applicants disagree with this position.

Applicants believe that the Examiner is confusing the flux in Evans as the brazing material. The brazing material in Evans is cladding 18 which is clad to the entire internal surface 14 and external surface 16 of tube 12. As stated in column 5, lines 10-13, "This wetting allows the brazing material to flow into a joint to be formed between the tube 12 and other components of the heat exchanger assembly and creates a sound braze joint." As Figure 3 of Evans clearly shows, the cladded brazing material 18 is removed during the brazing operation to form brazed joint 13.

Assuming for arguments sake that the Examiner is defining the brazing flux that is applied to brazing material 18 as being the "brazing material", there is nothing disclosed in Evans which defines the brazing flux as being applied in a straight line to a joint surface. As stated in column 4, lines 35-38, "The flux can be applied onto the joint area by any means such as brushing, dipping and spraying, the latter being preferred because it provides more uniform application." This description of the application of the flux in Evans would support a conclusion that the entire surface of the tube is coated with flux especially since the term "dipping" was included as one method of application. This description by Evans certainly does not support the present invention's limitation that "the brazing material is supplied in a substantially straight line to a joint surface between the flat top and the tubes." The brazing material in Evans is cladding 18 which is clad on the entire surfaces of tube 12 and the disclosure of Evans defines the flux as being applied over the entire surface and not in a substantially straight line. The only

disclosure of the straight line application of a brazing material is in Applicant's specification.

Thus, Applicants believe Claims 13, 23 and 25, as amended, patentably distinguish over the art of record. Likewise, Claims 15 and 17 which depend from Claim 13 are also believed to patentably distinguish over the art of record. Claims 12, 14, 21, 22, 24 and 26-31 have been cancelled. Reconsideration of the rejection is respectfully requested.

ENTRANCE OF AMENDMENT

Applicants respectfully request consideration and entrance of this amendment. Applicants have combined pending claims and thus Applicants do not believe any new issues have been presented.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the

Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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By: 

Michael J. Schmidt, 34,007

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

MJS/pmg